

USE WHATEVER DATA YOU HAVE AVAILABLE TO MAKE YOUR CASE.

One to many. Small cohort to large.

As improvement teams are working to demonstrate value to their respective stakeholders, one of the common challenges faced is the lack of adequate data to demonstrate impact. Rather than simply declare defeat, teams are instead encouraged to use whatever information is available as a starting point for making projections or supporting a hypothesis about a broader population. This type of "What if..." analysis may not be enough for complete stakeholder buy-in, but it can be sufficient to raise awareness, generate interest, or gain assistance in getting access to the full data set needed to build your case.

Using a patient story....

Identify a patient for whom you believe you have a compelling story about impact. Develop the overall story you would like to tell about this patient, THEN...

1. Collect real data that can be used to address the business case for helping that single patient. Consider clinical outcomes improvement from the EHR, reductions in utilization as documented in the record or self-reported by the patient, or actual charge information from claims data. In order to assess impact, you must be able to obtain the chosen metrics for a time period before your SDOH intervention and for a similar time period following the intervention.
2. Analyze the pre- and post-intervention data to determine what you can say about impact. If there is no measurable impact, you may need to reconsider the selected patient and choose another patient instead.
3. Translate utilization or clinical outcomes improvement to dollars. Use local average charge data for savings related to utilization reductions. Improvement in clinical outcomes creates value on its own and over time these improvements also drive utilization and cost reductions. Quantifying these reductions generally relies on reference to the literature and studies that have been done to document a financial impact associated with some change in a clinical metric. Studies do exist for measures such A1c in diabetes, blood pressure, and depression remission. However, when using these studies to calculate cost savings for an individual patient or individual clinic, care must be taken to ensure fidelity to the parameters of the study. This means that patient characteristics and timeframe must align.
4. Make assumptions about the applicability of the impact seen for that single patient to a broader population. This could be the entire population, those patients that have a similar need or condition as your story patient, or subset of one of these groups. You may also assume that the impact on additional patients may not be as great as on that one patient, so a percentage of that impact may be assumed. This is particularly important if the story patient you select can be viewed as an outlier in clinical condition, utilization, or cost.
5. Apply all or a percentage of the dollar impact for your single patient to the broader population based on the assumptions made. This answers the question--- "What if we had a similar impact on others?"

Examples when utilization and associated costs are reduced



Example-One patient story

Intervention	Impact shown with one patient	What if ... the same impact is made with similar patients in the clinic
Medication Assistance Program, but could be any to which the patient is referred	<p><i>Mary G. 62 y/o with diabetes; 20 ED visits in past year; screener indicated issues with affording meds; connected to medication assistance program.</i></p> <p>ED visits in past 3 months from 5 down to 1</p> <p>System savings = (20 annual visits – 4 annual visits) x \$1100 average ED charge in the area = (16*\$1100) = \$17,600</p>	<p>24,000 total clinic patients, 10% DM prevalence = 2400 w/DM</p> <p>Screener is picking up 23% of DM patients unable to afford meds = 552 people with med issues</p> <p>Assume only 10% have a result similar to Mary= 55</p> <p>System savings potential = 55 x \$17,600 = \$968,000.</p> <p>Can modify the assumption about how many will have a result similar to the story patient. Assuming 20% will make the projected system savings \$1,936,000. Assuming only 5% lowers it to \$482,000.</p>

A similar approach can be used if information is available for one group of patients within a clinic and you are trying to make the case for spread to an entire system. You can use the experience of the clinic to project a similar experience on a larger patient population as long as you can make reasonable assumptions about how closely the clinic population reflects that of the system as a whole.

Example-One clinic to system projection

Intervention	Impact in one clinic	What if ... the same impact is made with spread across a system
Medication Assistance Program, but could be any to which the patient is referred	<p>1200 total clinic patients, 10% DM prevalence = 120 w/DM.</p> <p>Screener is picking up 24% of DM patients unable to afford meds = 28 people with med issues</p> <p>Clinic staff are able to follow up with all 28 patients and learn that number with A1c > 9 has gone from 27 to 6. Number of quarterly ED visits has gone from 60 to 10.</p> <p>Clinic savings to system = 50 x 4 x \$1100 = \$220,000</p>	<p>System sees 180,000 adult patients</p> <p>Assume consistent 10% DM prevalence = 18,000 people w/ DM</p> <p>Assuming a consistent 24% of all DM patients having issues with affording medication would mean 4120 potential people with issues. However, patients in other parts of the system are primarily commercially insured as compared to a mix of Medicaid and uninsured in the original clinic.</p> <p>Assume only 10% have issues= 1800</p> <p>Assume only 1 ED visit saved @ \$1100</p> <p>System savings would be (\$1100 x 1800) = \$1,980,000</p>

Note that both the clinic and system savings are applicable within a fee for service reimbursement environment. Here the savings accrue to the payer. The clinic or health system will only benefit to the extent that there is an incentive for savings built into the reimbursement formulae or that the

organization can use the savings realized to negotiate a better reimbursement rate. In an alternative payment or capitated model where the organization takes on risk, however, dollars saved would be of direct benefit to the organization.

Example when patient payment sources can be identified

As part of their work on social health integration, a number of clinics have implemented systems to assist patients with obtaining eligibility for health insurance or other funding for health care services. These systems help the clinic both avoid the cost of providing uncompensated care and increase its actual revenue. While the clinic office visits and associated diagnostic work may not represent large amounts of money, the benefits to other parts of the organization can be quite significant. Again, using a “what if” scenario can illustrate these benefits to organizational stakeholders. In this case, the steps are relatively simple.

1. Collect actual data on a single patient for whom uncompensated care has been provided and now, through screening and referral, has obtained funding to pay for care.
2. Determine the cost of providing the past services in the clinic. Identify areas of the hospital or other parts of the organization where care has been or is planned to be provided to the patient. Determine or make an estimate of those costs. If this information is not available, focus on the anticipated revenue for the services once coverage is obtained.
3. Make assumptions about the numbers of additional patients treated in the organization that are uninsured and have similar service needs to the first patient.
4. Use the numbers of additional patients to calculate the avoided cost as well as the new revenue potential.

In the example below, the clinic is providing uncompensated prenatal care and can receive future payment for these services. Of greater impact is the fact that the patient’s delivery will occur in the hospital; gaining a payment source for the patient will offset the cost of providing the care and could actually provide some incremental revenue (to the extent that reimbursement is greater than cost). In this example, we assume that there are 29 more patients for whom the hospital provides free deliveries. This could represent more than \$200,000 in cost avoidance.

Example-Revenue and cost avoidance

Intervention	Impact shown with one patient in one clinic	What if ...
Insurance Eligibility	<i>Delia T is 25 y/o pregnant immigrant with no fixed address. Clinic was able to refer Delia for housing assistance and secure funding for prenatal care and delivery costs</i> Hospital avoided \$6800 uncompensated care cost for her delivery	Hospital now does 30 free deliveries each year. Potential offset to cost = (\$6800 x 30) = \$204,000 if women can be identified and assistance prospectively provided If one of those deliveries was pre-term and resulted in a NICU baby, there could be an additional cost offset of more than \$100,000 for the NICU stay.

Revenue opportunities

No show rates are a challenge for many clinics and while there are multiple root causes for no shows, lack of transportation is one often cited by patients. Clinics that are screening for and resolving perceived transportation issues will possibly experience a reduction in their no-show rate. In a fee for service reimbursement environment, this can have a positive impact on staff morale, productivity, and actual revenue.

Intervention	Historical no show rate	Current no show rate	Impact
Transportation Assistance Program	24%	20%	<p>In a clinic with 30,000 annual visits, the 24% no-show rate meant that 7200 visits were potentially lost if the clinic did not consistently overbook.</p> <p>Reducing the no show rate to 20% results in $7200 - (30,000 \times .20) = 1200$ fewer missed visits in a year</p> <p>At an average visit reimbursement rate = \$110</p> <p>Potential additional revenue = $1200 \times \\$110 = \\$132,000$</p>

Additional revenue opportunities will vary by the local environment but calculating the amount of revenue potential once these opportunities are identified is very straightforward. In a pay for performance system, improvements in clinical outcomes or better adherence to prevention guidelines may qualify for an incentive payment. Both can result from enhanced patient activation as well as some of the direct services clinics are providing. Some payers may also be willing to pay directly for some of the services addressing social health. In all cases, the revenue potential comes down to negotiated per person or per visit amount times the number of applicable patients.

Qualitative benefits

In many organizations and for many community partners, financial justification for the work of social health integration is not a driver. In these cases, the driver is more often related to mission and to a desire for equity and social justice. While this is a positive situation for the communities served, one cannot forget that without margin, there will be no mission. Thus, it is important to attempt to assign dollars to areas that represent qualitative value even if the dollars are not precise. Some of the areas to consider include those in the table below.

	What to measure	Qualitative value	Potential for Financial Impact
Student rotations	Number of students Student feedback about the experience Number of student hires into regular positions	Contribution to teaching mission Opportunity to spread importance of SDOH as student enters workforce	Cost avoidance of hiring an experienced student to fill a full- time position; include recruitment and training time Estimate = \$8000 based on literature estimate of 20% of a \$40,000 salary Reputation of organization that facilitates student recruitment
Care team joy in work	Workload units Turnover rates Satisfaction survey	Can result in greater staff productivity Reduction in turnover	Increased productivity can lower cost per unit of work such as an office visit Avoidance of turnover of just one physician position can result in cost avoidance of up to \$500,000 (Source: AMA) Losing a nurse due to burnout could cost \$15-20,000. Average cost of turnover = 20% of annual salary.
Clinic reputation	Patient satisfaction Clinical outcomes improvement	Potential increased patient volume resulting from patient and medical neighborhood referrals	Revenue related to increased volume Number of new patients x average visit reimbursement
Community partnerships	Referrals for health care from partners	Potential increased patient volume resulting from partner agency referrals	Revenue related to increased volume Number of new patients x average visit reimbursement FQHC example: Relationship with Head Start developed through their Community Hub model has yielded 800 new family referrals to the FQHC for their health care. Assuming 2720 actual patients in those families and a third of them would become part of the FQHC's panel. Revenue potential = 1360 x 12 x \$68 which is the FQHC PMPM rate from Medicaid = \$732,442.